Title	Check, test, and inspect special hazards fire detection and alarm systems		
Level	4	Credits	20

Purpose	This unit standard is for the training of fire alarm technicians and covers monthly checking and testing and annual checking, testing, and inspection (surveys) of special hazards fire detection and alarm systems in accordance with standard NZS 4512:2021 and standards relevant to special hazards systems fire detection and alarm systems.
	People credited with this unit standard are able to prepare for and conduct checks, tests, and inspections of special hazards fire detection and alarm systems.

Classification Mechanical Engineering > Fire Detection and Alarm Systems
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Available grade Achi	eved
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#### **Guidance Information**

 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the: Ministry of Business, Innovation and Employment (MBIE) Acceptable Solutions (AS)

and Verification Methods (VM),

NZS 4512:2021, *Fire Detection and Alarm Systems in Buildings*. Available at <u>https://www.standards.govt.nz/</u>

Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.

2 Definitions

*Fire detection and alarm system* refers to an installation of apparatus, which performs specified fire related functions in response to the operation of a detector, manual call point, or other input. It includes manual call points, detectors, control and indication equipment, alerting devices, interconnections, fittings, labels, energy sources, and remote signalling devices and may include emergency warning and intercommunication systems (EWIS) where applicable.

*Inspection* refers to an organised examination of characteristics of fire protection systems against established standards.

Special hazards fire detection and alarm system refers to fire detection and alarm systems which apply electrical actuation to operate mechanical extinguishing systems. It includes water based, chemical, and clean agent gas flood installations.

*Standards* refer to NZS 4512:2021, and to standards relevant to the special hazards systems.

*Systems documentation* refers to the documentation required to be maintained by NZS 4512:2021 and other relevant standards, including logbook, test reports, equipment details and drawings, specifications, contract agreement, software configurations and versions, additions and alterations, fire reports, building consents standards, codes of practice, installation instructions, test and commissioning procedures, test and maintenance records.

*Tests* refer to the carrying out of operations, measurements, or functions to confirm correct function or performance of components and systems in accordance with the standards.

*Workplace procedures* refer to the documented procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site safety procedures, equipment operating procedures, codes of practice, quality assurance procedures, housekeeping standards, charging of time and materials, management of drawings and documentation, procedures to comply with legislative and local body requirements.

3 Assessment information

Range

- a. All activities must comply with relevant legislative and/or regulatory requirements and recognised codes of practice.
- b. All activities must demonstrate safe working practices.
- c. All activities must be completed and reported within agreed timeframes.
- d. For assessment purposes, competence must be demonstrated on at least one each of a weekly, quarterly, six-monthly and annual check, test, and inspection.
- e. All activities must be done in accordance with applicable plans, systems documentation, and workplace procedures.

# Outcomes and performance criteria

## Outcome 1

Prepare for checks, tests, and inspections of special hazards fire detection and alarm systems.

#### Performance criteria

- 1.1 Site access and timing of the inspections are agreed with site managers or customers.
- 1.2 Site occupational safety and health implications for self and others are identified and control measures are put in place.
- 1.3 Details of systems and scope of testing are identified from company records and systems documentation, and any special precautions that are relevant to the installations are identified and recorded.

## Outcome 2

Conduct checks, tests, and inspections of special hazards fire detection and alarm systems.

## Performance criteria

- 2.1 Checks, tests, and inspections are conducted.
- 2.2 Reports are prepared, entered in the system log, and copies are sent to the customer.
- 2.3 Malfunctions or defects are reported and arrangements are made for their rectification.
- 2.4 Systems are restored to operational status.
- 2.5 Site personnel are advised of system status and test completion.

Replacement information	This unit standard replaced unit standard 9395.
Planned review date	31 December 2029

### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 October 2006	31 December 2017
Review	2	15 October 2015	31 December 2026
Review	3	27 June 2024	N/A

Consent and Moderation Requirements (CMR) reference	0013	
This CMR can be accessed at <u>http://www.nzqa.govt.nz/framework/search/index.do</u> .		

#### Comments on this unit standard

Please contact the Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council <u>qualifications@hangaarorau.nz</u> if you wish to suggest changes to the content of this unit standard.